

# Information Note<sup>1</sup>

<b>Event:</b>	<b>Workshop on Implementing Nuclear Detection Architecture</b>
<b>Organizers:</b>	The Department of Homeland Security's Domestic Nuclear Detection Office (DND)
<b>Date and Venue</b>	23-25 March, 2010, Garmisch, Germany
<b>Participants:</b>	Representatives from governments, international organizations and institutions. Around 40 participants

## 1. Objectives

Discuss how to improve the ability to detect nuclear and other radioactive materials and substances in order to prevent illicit trafficking in such materials and substances and to include cooperation in the research and development of national detection capabilities.

To focus on risk assessment methodologies, architecture performance evaluation and architecture and capabilities enhancement

## 2. Background

This workshop was one in a series of events under the auspices of the Global Initiative to Combat Nuclear Terrorism (GICNT). The GICNT partners and observers participated in discussions and made presentations expressing their views on the issues relevant to the subject of the seminar. The task was to enhance the exchange of ideas and provide insight into methodologies for developing effective nuclear detection architecture. Representative of the 1540 Committee experts working for the 1540 Committee has made a presentation on nuclear aspects of resolution 1540 (2004) and actively participated in interactive discussions.

## 3. Highlights

The workshop consisted of two phases. The first one was about discussing some issues of a general nature related to risk assessment methodologies. In this regard presentations were delivered on the Threat Assessment for Decision Makers, the UK National Risk Assessment and Register, the INTERPOL Perspective on Nuclear Detection, the Overview on GICNT Activity in 2010, etc. The main rationale behind these presentations was to demonstrate the need for a comprehensive approach towards all emerging threats whatever their nature and origin: natural disasters, aging population, likelihood of a terrorist attack or social unrest. Many speakers underlined that early and comprehensive threat perception is a key to right risk assessment that contributes to mobilization and allocation of available resources, timely preparations and ability to mitigate, at least partially, the consequences of hazardous event or even to prevent it.

The second phase included presentations more focused on issues of non-proliferation, nuclear smuggling followed up by interactive discussions. The work was concentrated on two tracks: Risk Assessment and Architecture Evaluation. The track was about politico-diplomatic, legislative, enforcement and

---

<sup>1</sup> For information – not an official report. The views expressed here do not necessarily represent those of the 1540 Committee or of the organizers or participants in the event.

cooperative measures to be taken to alleviate the threat of nuclear smuggling and terrorism. The second track was more of a technical nature dealing with existing infrastructure, detection equipment, security of information, operational procedures and training of personnel.

#### 4. **Presentation by the 1540 Committee expert**

The main stress was on the practical meaning of resolution 1540 (2004) that helps to identify and to bridge the gaps between the legal commitments made by States to the international non-proliferation treaties and conventions, and the implementation of enforcement measures. The preventive role of the resolution aimed at identifying potential risks and threat was also highlighted.

The presentation drew the attention of the audience to the efforts undertaken by States, international organizations and the Committee to prevent non-state actors from gaining access to WMD and nuclear weapons and related materials in particular. In this regard, it was noted that the Committee continues to analyze the evolution of risks and threats to identify the weakest points in the international system combating nuclear smuggling on the basis of information officially communicated by States.

The main point made by the speaker was that though these measures brought positive results a lot has to be done to prevent the potential convergence of two threats – aggressive non-state actors and proliferation of WMD and their means of delivery.

#### 5. **Additional Notes**

Some important issues were raised in the course of the presentations or during interactive discussions. Some speakers noted that the main task of having nuclear detection architecture is to enhance national and international capabilities to spot and intercept smuggled nuclear materials. In this regard they focused on the need to improve characteristics of the relevant technical equipment, to upgrade all components of that architecture, and to stimulate the use of training and exercises. Other presenters acknowledging the importance of a technical side of this issue spoke more about political and organizational matters. They underlined the fact that without having all elements of nuclear detection architecture in place-including the development of mutually acceptable risk analysis methodology, enhancing export/import controls, availability of well trained personnel, data exchange standardization, exchange of information on existing practices and wide international cooperation there could be no effective struggle against nuclear smuggling.

#### 6. **Some Conclusions**

It was acknowledged that effective and well coordinated enforcement measures to enhance the existing nuclear detection architecture are needed for preventing non-state actors from getting access to nuclear weapons and related materials. The participants agreed that though nuclear related terrorism is not an event most likely to happen the consequences of such an event would be disastrous.

They agreed that removal and securing high priority vulnerable nuclear materials around the world and converting research reactors to operate on fuel that cannot be used in nuclear weapons would contribute to nuclear safety and would make the development of nuclear detection architecture an easier task.

#### 7. **Additional comments**

For further information, please contact the 1540 Committee experts by e-mail at [1540experts@un.org](mailto:1540experts@un.org)